

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) RENEWAL
INDIANA DEPARTMENT OF ENVIRONMENTAL
MANAGEMENT OFFICE OF AIR QUALITY
and
THE CITY OF INDIANAPOLIS
OFFICE OF ENVIRONMENTAL SERVICES**

**St. Francis Hospital & Health Center
1600 Albany St.
Beech Grove, Indiana 46107**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F097-14068-00163	
Issued by: Original John B. Chavez John B. Chavez, Administrator Office of Environmental Services	Issuance Date October 8, 2002 Expiration Date: October 8, 2007

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary health services facility with 3 boilers.

Authorized individual:	Assistant Director of Engineering
Source Address:	1600 Albany Street, Beech Grove, Indiana 46107
Mailing Address:	1600 Albany, Street, Beech Grove, Indiana 46107
SIC Code:	8062
Source Location Status:	Marion
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP)
	Minor source under PSD
	Minor source under 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

The stationary source consists of the following emission units and pollution control devices:

1. Emission Unit ID # 001 consisting of One (1) Natural Gas Fired Keeler Boiler. Model No. DS-30. Serial No. 94107. Maximum rated heat input capacity of 37.4 MMBtu/hr. Firing of # 2 fuel oil for test firing, backup and as an alternative fuel. Installation date of October 1994.
2. Emission Unit ID #002 consisting of One (1) Natural Gas Fired Keeler Boiler. Model No. DS-30. Serial No. 93117. Maximum rated heat input capacity of 37.4 MMBtu/hr. Firing of # 2 fuel oil for test firing, backup and as an alternative fuel. Installation date of January 1994.
3. Emission Unit ID #003 consisting of One (1) Natural Gas Fired Keeler Boiler. Model No. CPM 304. Serial No. 14223. Maximum rated heat input capacity of 34.3 MMBtu/hr. Firing of # 2 fuel oil for test firing, backup and as an alternative fuel. Installation date of 1964.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- (1) 150,000 Btu kerosene space heater.
- (2) 85,000 Btu space heater (2) units.
- (3) Degreasing operations not exceeding 145 gallons usage per 12 month period.
- (4) Closed loop heating and cooling systems.
- (5) Replacement filters for air handling units.
- (6) Purging of gas lines and vessels related to routine maintenance of buildings,

- structures or vehicles not production related.
- (7) Blowdown for boilers, compressors, etc.
- (8) 1062 horsepower primary diesel generator (2) units.
- (9) 1062 horsepower standby diesel generator (1) unit.
- (10) Purge double block and bleed valves.
- (11) The following activities or categories of activities with individual HAP emissions not previously identified which have potential emissions greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP; Ethylene Oxide Sterilizer/Aerator (1) unit.

A.5 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2, has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) to renew a Federally Enforceable State Operating Permit (FESOP).

A.6 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

(a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, OES, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

(b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by OES.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

The submittal by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAQ, and OES within a reasonable time, any information that IDEM, OAQ, and/or OES may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ and OES copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ and/or OES may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, and/or OES may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ and/or OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and/or OES. IDEM, OAQ and/or OES may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or OES makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner and/or OES within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ

or OES, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAQ

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)

or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

OES

Telephone No.: 317/327-2234

Facsimile No.: 317/327-2274

Failure to notify IDEM, OAQ or OES, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ and/or OES may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ or OES by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ or OES determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ and/or OES to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ or OES at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or OES may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and/or OES and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

- (1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and/or OES on or before the date it is due.

- (2) If IDEM, OAQ and/or OES upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ and/or OES takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ and OES any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ and OES in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ and/or OES, U.S. EPA, or an authorized representative to perform

the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM,

OAQ the applicable fee is due April 1 of each year.

- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B).

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.8 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ and OES.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue

Indianapolis Indiana 46221-2097

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ and OES of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and/or OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and OES, if the source submits to IDEM, OAQ and OES, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

C.13 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ and OES upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee’s current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.
- C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]
-
- (a) When the results of a stack test performed in conformance with Section C - Performance

Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.15 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

- (a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and/or OES on or before the date it is due.

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

-
- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or OES makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or OES within a reasonable time.
 - (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and/or OES on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

1. Emission Unit ID # 001 consisting of One (1) Natural Gas Fired Keeler Boiler. Model No. DS-30. Serial No. 94107. Maximum rated heat input capacity of 37.4 MMBtu/hr. Firing of # 2 fuel oil for test firing, backup and as an alternative fuel. Installation date of October 1994.
2. Emission Unit ID #002 consisting of One (1) Natural Gas Fired Keeler Boiler. Model No. DS-30. Serial No. 93117. Maximum rated heat input capacity of 37.4 MMBtu/hr. Firing of # 2 fuel oil for test firing, backup and as an alternative fuel. Installation date of January 1994.
3. Emission Unit ID #003 consisting of One (1) Natural Gas Fired Keeler Boiler. Model No. CPM 304. Serial No. 14223. Maximum rated heat input capacity of 34.3 MMBtu/hr. Firing of # 2 fuel oil for test firing, backup and as an alternative fuel. Installation date of 1964.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 FESOP Limit [326 IAC 2-8-4]

The input of distillate fuel oil to EU 001, EU 002 and EU 003 shall be limited to 2.71 millions gallons per twelve (12) consecutive month period rolled on a monthly basis. This distillate fuel oil usage limitation is equivalent to SO₂ emissions of less than 95 tons per (12) consecutive month period rolled on a monthly basis.

D.1.2 Opacity [326 IAC 12-1]

Pursuant to 40 CFR 60, Subpart Dc emission units EU 001 and EU002 when combusting oil are limited to 20% opacity. The opacity limit applies at all times, including periods of startup, shutdown, and malfunction.

D.1.3 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 12-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations), the SO₂ emissions from EU # 001 and EU # 002 shall not exceed five tenths (0.5) pounds per million Btu heat input [326 IAC 7-1.1]

D.1.4 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units)

- (a.) Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.
- (b.) Pursuant to 40 CFR 60.42c(d), the sulfur content of the fuel oil used by EU 001 and EU 002 shall not exceed five-tenths percent (0.5%) by weight.

D.1.5 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-2] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from EU 003 shall not exceed five tenths (0.5) pounds per MMBtu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day rolling weighted average

D.1.6 Particulate Matter Emissions (PM) [326 IAC 6-2-2] [326 IAC 6-2-4]

- (a) Pursuant to 326 IAC 6-2-2(a) Particulate emissions from indirect heating facilities constructed prior to September 21, 1983 and located in Marion County, EU 003 shall be limited to 0.49 pounds per million Btu. This is based on the following equation:

$$Pt = \frac{0.87}{Q^{0.16}}$$

Where:

Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operation permit shall be used.

For EU 003, the total source Q = 34.3 million Btu per hour

- (b) Pursuant to 326 IAC 6-2-4(c) Particulate emissions from indirect heating facilities constructed after September 21, 1983 and located in Marion County, EU 001 and EU 002 shall be limited to 0.32 pounds per million Btu. This is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where:

Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's operation permit application, except when some lower capacity is contained in the facility's operation permit, in which case, the capacity specified in the operation permit shall be used. For EU 001 and EU 002, the total source Q = 109.1 million Btu per hour

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan in accordance with Condition B.13 of this Permit is required for Emission Unit ID # 001, # 002 and # 003.

Compliance Determination Requirements

D.1.8 Sulfur Dioxide Emissions and Sulfur Content

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance utilizing one of the following options:

- (a) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
- (b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
- (1) Oil samples may be collected from the fuel tank immediately after the fuel tank

is filled and before any oil is combusted; and

- (2) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.9 Visible Emissions Notations

- (a) Visible emission notations of the Emission Units ID # 001, 002 and 003 stack exhaust shall be performed once per shift during normal daylight operations when burning distillate oil and exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.3, 1.4 and D.1.5 the Permittee shall maintain records in accordance with (1) through (6) below. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report.

- (b) To document compliance with Condition D.1.9, the Permittee shall maintain records of visible emission notations of the EU ID #'s 001, 002 and 003 stack exhaust once per shift.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Natural Gas Consumption

Pursuant to 40 CFR Part 60 Subpart Dc, the Permittee shall:

- (a) Daily record the volume of natural gas combusted of EU 001 and 002 ;
- (b) Retain records of all fuel combustion records and support information for a period of five (5) years from the date of the measurement or report.

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 in any compliance period when fuel oil is combusted, and the natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**and
CITY OF INDIANAPOLIS
OFFICE of ENVIRONMENTAL SERVICES**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: St. Francis Hospital & Health Centers
Source Address: 1600 Albany Street, Beech Grove, Indiana 46107
Mailing Address: 1600 Albany Street, Beech Grove, Indiana 46107
FESOP No.: F097-14068-00163

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**CITY OF INDIANAPOLIS
OFFICE of ENVIRONMENTAL SERVICES
DATA COMPLIANCE**

**2700 South Belmont Avenue
Indianapolis, Indiana 46221
Phone: 317-327-2234
Fax: 317-327-2274**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: St. Francis Hospital & Health Centers
Source Address: 1600 Albany Street, Beech Grove, Indiana 46107
Mailing Address: 1600 Albany Street, Beech Grove, Indiana 46107
FESOP No.: F097-14068-00163

This form consists of 2 pagesPage 1 of 2

- 9 This is an emergency as defined in 326 IAC 2-7-1(12)
 CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
AND
CITY OF INDIANAPOLIS OFFICE of ENVIRONMENTAL SERVICES**

FESOP Quarterly Report

Source Name: St. Francis Hospital & Health Centers
Source Address: 1600 Albany Street, Beech Grove, Indiana 46107
Mailing Address: 1600 Albany Street, Beech Grove, Indiana 46107
FESOP No.: F097-14068-00163
Facility: All Boilers (EU001, EU002 and EU003)
Parameter: No. 2 Fuel Usage
Limit: 2.71 million gallons per twelve (12) consecutive month period, rolled on a monthly basis

QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.
**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

and
CITY OF INDIANAPOLIS
OFFICE of ENVIRONMENTAL SERVICES

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: St. Francis Hospital & Health Centers
Source Address: 1600 Albany Street, Beech Grove, Indiana 46107
Mailing Address: 1600 Albany Street, Beech Grove, Indiana 46107
FESOP No.: F097-14068-00163

Months: _____ to _____ Year: _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
CITY OF INDIANAPOLIS
OFFICE of ENVIRONMENTAL SERVICES**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: St. Francis Hospital & Health Centers
Source Address: 1600 Albany Street, Beech Grove, Indiana 46107
Mailing Address: 1600 Albany Street, Beech Grove, Indiana 46107
FESOP No.: F097-14068-00163

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Report period

Beginning: _____

Ending: _____

Boiler Affected

Alternate Fuel

Days burning alternate fuel

From to

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Office of Environmental Services**

Addendum to the Technical Support Document (TSD) for a Federally Enforceable State
Operating Permit (FESOP) Renewal

Source Name:	St. Francis Hospital & Health Center
Source Location:	1600 Albany Street, Beech Grove, Indiana 46107
County:	Marion
SIC Code:	8062
Operation Permit No.:	F097-14068-00163
Permit Reviewer:	Warner Waters

On July 6, 2002, the Office of Air Quality (OAQ) and Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that St. Francis Hospital and Health Center had applied for a FESOP to operate a stationary health services facility with 3 boilers. The notice also stated that OAQ and OES proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

The following change to the FESOP Permit will be made. The TSD will remain as it originally appeared when published. OAQ and OES prefer that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the permit has been published are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. (bolded language has been added):

Upon further review, OES has added one insignificant activity to the FESOP Renewal. The additional insignificant activity does not change the NESHAP applicability, The ethylene oxide sterilizer is not subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63.360, Subpart O), because it is exempt by sect. 63.360(e). This subpart does not apply to stationary sources such as hospitals.

Change 1:

The following addition was made to the FESOP section A..3 Insignificant Activities.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- (1) 150,000 Btu kerosene space heater.
- (2) 85,000 Btu space heater (2) units.
- (3) Degreasing operations not exceeding 145 gallons usage per 12 month period.
- (4) Closed loop heating and cooling systems.
- (5) Replacement filters for air handling units.
- (6) Purging of gas lines and vessels related to routine maintenance of buildings, structures or vehicles not production related.
- (7) Blowdown for boilers, compressors, etc.
- (8) 1062 horsepower primary diesel generator (2) units.
- (9) 1062 horsepower standby diesel generator (1) unit.
- (10) Purge double block and bleed valves.
- (11) **The following activities or categories of activities with individual HAP emissions not previously identified which have potential emissions**

greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP; Ethylene Oxide Sterilizer/Aerator (1) unit.

**Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services**

**Technical Support Document (TSD) for a Federally Enforceable State
Operating Permit (FESOP) Renewal**

Source Background And Description

Source Name:	St. Francis Hospital & Health Center
Source Location:	1600 Albany Street, Beech Grove, Indiana 46107
County:	Marion
SIC Code:	8062
Operation Permit No.:	F097-14068-00163
Permit Reviewer:	Warner Waters

The Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) have reviewed a FESOP renewal application from St. Francis Hospital and Health Centers relating to the operation of three boilers. St. Francis Hospital and Health Centers was issued FESOP F097-5510-00163 on December 12, 1996.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

1. Emission Unit ID # 001 consisting of One (1) Natural Gas Fired Keeler Boiler, Model No. DS-30, Serial No. 94107, with a maximum rated heat input capacity of 37.4 MMBtu/hr, Firing of # 2 fuel oil for test firing, backup and as an alternative fuel. Installation date of October 1994.
2. Emission Unit ID #002 consisting of One (1) Natural Gas Fired Keeler Boiler, Model No. DS-30, Serial No. 93117, with a maximum rated heat input capacity of 37.4 MMBtu/hr, Firing of # 2 fuel oil for test firing, backup and as an alternative fuel. Installation date of January 1994.
3. Emission Unit ID #003 consisting of One (1) Natural Gas Fired Keeler Boiler, Model No. CPM 304, Serial No. 14223, with a maximum rated heat input capacity of 34.3 MMBtu/hr, Firing of # 2 fuel oil for test firing, backup and as an alternative fuel. Installation date of 1964.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) 150,000 Btu kerosene space heater
- (2) 85,000 Btu propane space heater (2 units)
- (3) Degreasing operations that do not exceed 145 gallons usage per 12 month period.

- (4) Closed loop heating and cooling systems.
- (5) Replacement filters for air handling units.
- (6) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures or vehicles where air emissions from those activities would not be associated with any production process.
- (7) Blowdown for boiler(s), compressor(s), pumps and/or cooling tower(s).
- (8) 1062 Horsepower primary diesel generator(s) (2 units).
- (9) 1062 Horsepower standby diesel generator (1 unit).
- (10) Purge double block and bleed valves.

Existing Approvals

FESOP 097-5510-00163, issued on December 12, 1996.

All conditions from previous approvals were incorporated into this FESOP except for conditions in section D.2, which are for the medical waste incinerator that discontinued operation on March 10, 2000. Due to its removal, 40 CFR 60.30 Subpart Ce (Emission Guidelines and Compliance Times for Hospital /Medical/Infectious Waste Incinerators) no longer applies. The Monthly Report Form has been replaced with a Quarterly Report Form for All Boilers

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on March 12, 2001.

Emission Calculations

See page 3 of 13 in Appendix A of this document for detailed emissions calculations

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM10	6.6
PM	6.8
SO ₂	146.5
VOC	1.6
CO	18.6
NO _x	74.7

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP	PTE (tons/year)
for any single HAP	Negligible

For total HAP	Negligible
---------------	------------

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of Sulfur Dioxide (SO₂) is equal to or greater than 100 tons per year Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The source, issued a FESOP on December 12, 1996, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original FESOP. F097-5510-00163 issued on December 12, 1996.

	POTENTIAL TO EMIT AFTER ISSUANCE (tons/year)						
Process/ facility	PM	PM-10	SO ₂	VOC	CO	NOx	HAPS
Boiler EU # 1, EU# 2 & EU # 3	6.7	6.5	95.0	1.4	17.0	68.3	Negligible
Insignificant Activities	0.1	0.1	1.2	6.4	1.6	6.4	Negligible
Total Emissions (tons/yr)	6.8	6.6	96.2	7.8	18.6	74.7	Negligible

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM10	unclassifiable
Lead	unclassifiable
SO ₂	maintenance attainment
OZONE	maintenance attainment
CO	attainment
NO _x	attainment

Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

40 CFR Part 60.40c & 326 IAC 12

The New Source Performance Standard (NSPS) for Small Industrial - Commercial - Institutional Steam Generator Units, 40 CFR Part 60.40c Subpart Dc (326 IAC 12) is applicable to Boiler # 1 (EU 001) and Boiler # 2 (EU 002) at this source because each emission unit commenced construction and operation after June 9, 1989. 40 CFR Part 60.40c Subpart Dc (326 IAC 12) is not applicable to Boiler # 3 (EU 003) because the emission unit was constructed and in operation prior to August 17, 1971.

The NSPS limits SO₂ emissions for each unit to no greater than 0.5 lbs SO₂/MMBtu heat input when combusting distillate fuel oil and limits stack opacity to no greater than 20% opacity as a particulate matter (PM) standard. The NSPS also requires initial notification of NSPS applicability per affected unit and record keeping and reporting requirements for daily amounts of fuel(s) combusted and fuel sulfur content for fuel oil(s) combusted. Only Record Keeping Requirements are applicable when combusting natural gas.

40 CFR Part 63 & 326 IAC 14

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source is required to maintain a Preventive Maintenance Plan (PMP) on site. Pursuant to 326 IAC 2-8-3(c)(6)(FESOP: Permit Application), the source is not required to submit the plan. However, the PMP maintained on site must meet the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan). The previous FESOP issued to this source, F097-5481-00265, had the requirement included in Condition D.1.7 and is being carried over to this renewal.

326 IAC 2-2 Prevention of Significant Deterioration Requirements

The unrestricted potential to emit any regulated pollutant does not exceed 250 tons per year, the source is not on the list of 28 source categories under 326 IAC 2-2-1(p), and no significant modifications were made pursuant to 326 IAC 2-2. Therefore 326 IAC 2-2 does not apply.

326 IAC 2-6-1 Applicability

This source is subject to 326 IAC 2-6-1, because it has the potential to emit oxides of nitrogen (NO_x) into the ambient air at levels equal to or greater than ten (10) tons per year. Pursuant to this rule, the owner/operator of the source must submit an emission statement for the source.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100 tons per year) of SO₂. Pursuant to this rule, the owner/operator of the source must submit an emission statement for the source. The statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6 and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8).

326 IAC 5-1-2 Opacity Limitations

Pursuant to this rule, except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), the visible emissions shall meet the following:

- a) opacity shall not exceed an average of 30% opacity in 24 consecutive readings.
- b) opacity shall not exceed an average of 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

State Rule Applicability - Individual Facilities

Boilers

326 IAC 6-2-1 Emission limitation for facilities specified in 326 IAC 6-2-1(b)

Boilers #1 and #2 were constructed after September 21, 1983 therefore 326 IAC 6-2-1(d) and 326 IAC 6-2-4 (1994) applies.

$$Pt = \frac{1.09}{Q^{0.26}}$$

$$Pt = \frac{1.09}{(34.3 + 37.4 + 37.4)^{0.26}}$$

Pursuant to 326 IAC 6-2-1(d) Boilers #1 and #2, with a Q = 109.1 MMBtu/hr, Pt shall not exceed 0.32 pounds per million Btu.

$$Pt = \frac{1.09}{109.1^{0.26}}$$

In 1994 Q = 109.1 MMBtu/hr due to the fact that all three boilers were in operation.

$$Pt = \frac{1.09}{3.38}$$

$$Pt = 0.32$$

326 IAC 6-2-1 Emission limitation for facilities specified in 326 IAC 6-2-1(b)

Boiler #3 was constructed and in operation before June 8, 1972 therefore 326 IAC 6-2-1(b) and 326 IAC 6-2-2 (1964) applies.

$$Pt = \frac{0.87}{Q^{0.16}}$$

$$Pt = \frac{0.87}{(34.3)^{0.16}}$$

Pursuant to 326 IAC 6-2-2(b) Boiler #3, with a Q = 34.3 MMBtu/hr, Pt shall not exceed 0.49 pounds per million Btu.

$$Pt = \frac{0.87}{1.760}$$

$$Pt = 0.49$$

In 1964 Q = 34.3 MMBtu/hr due to the fact that this was the only boiler in operation.

Using the AP-42 Table 1.3-2 PM emission factor of 2 lbs PM/1000 gal distillate fuel, PM emissions are calculated to be 0.014 lbs PM/MMBtu which appears to comply with the emission limitation(s) specified by 326 IAC 6-2. Utilizing the AP-42 Table 1.4-1 PM emission factor of 13.7 lbs PM/MMCF of natural gas burned, PM emissions while combusting natural gas are calculated to be 0.0134 lbs PM/MMBtu which appears to demonstrate compliance with the limit specified by 326 IAC 6-2 while combusting natural gas. No fuel use restriction or add on control is necessary to meet the PM lbs/MMBtu limitation specified by 326 IAC 6-2 as actual PM emissions from these Emission Units is below the limitation(s) specified by 326 IAC 6-2.

The source has the Potential to Emit SO₂ above the Title V major source threshold(s). However, actual emissions are less than major source threshold(s) and, therefore, qualifies to be as a FESOP source. Pursuant to 326 IAC 2-8, Emission Unit ID's EU 001, EU 002 and EU 003 are further restricted to 2.71 MMgal of # 2 fuel oil consumption per rolling twelve consecutive month period, are required to record keep daily fuel oil consumption and are to report sulfur content, heat content, usage and SO₂ emissions on a quarterly basis. SO₂ emissions are enforceably restricted, per 326 IAC 2-8, to less than 95 tons per year. Permit requirements to limit any specific source wide regulated pollutant potential to emit or allowable emission level to below major source threshold levels would also be enforceable as per 326 IAC 2-8.

$$2.71 \text{ Mmgal/year} \times 0.5 \text{ lbs SO}_2/\text{MMBtu} \times 0.14 \text{ MMBtu/gal} \times \text{ton}/2000 \text{ lbs} = 95.0 \text{ tons SO}_2/\text{year}$$

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations

Each of the three boilers, Emissions Unit ID's EU 001, EU 002 and EU 003, has potential SO₂ emissions exceeding 25 tons per year and are thereby limited to 0.5 lbs/MMBtu per 326 IAC 7-2.1. In addition, the source is required, per 326 IAC 7-1.1, to record keep daily fuel oil consumption and is required to report sulfur content when combusting fuel oil, heat content, usage and SO₂ emissions on a quarterly basis.

Using the AP-42 Table 1.3-2 SO₂ emission factor of 142 (S%) lbs SO₂/1000 gal distillate oil fired and reported actual sulfur content of 0.3%, actual SO₂ emissions are calculated to be 0.3 lbs SO₂/MMBtu which demonstrate compliance with the limit specified in 40 CFR Subpart Dc and 326 IAC 7-1.1. The restriction of total annual distillate oil fuel consumption for all three boiler Emission Units combined to 2.71 MMgal/yr oil fired at the allowable emission rate of 0.5 lbs SO₂/MMBtu yields 95 tons SO₂ which demonstrates compliance with the long term SO₂ ton/year limit specified by 326 IAC 2-8.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

All compliance requirements from previous approvals were incorporated into this FESOP. The compliance monitoring requirements applicable to this source are as follows:

These monitoring conditions are necessary to ensure compliance with SO₂ allowable lb/MMBtu emission limits specified in the NSPS for boilers, 40 CFR Part 60 Subpart Dc and in 326 IAC 7-1.1 Sulfur Dioxide Emission Limitations. In addition, SO₂ emissions in tons per year are restricted to no greater than 95 tons per year for any combination of operating boiler(s) to ensure compliance with 326 IAC 2-8 Federally Enforceable State Operating Permit Program.

1. The emission units EU 001, EU 002 and EU 003 have applicable compliance monitoring

conditions as specified below:

Once per shift visible emissions notations of the boilers EU 001, EU 002 and EU 003 shall be performed during normal daylight operations when burning distillate oil. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

The Compliance Determination Requirements of Section D in the permit requires VOC limitation based on usage. Compliance Determination Requirements are sufficient to demonstrate continuous compliance, therefore they will not be supplemented with Compliance Monitoring Requirements.

Conclusion

The operation of these boilers will be subject to the conditions of the attached proposed FESOP renewal No. F097-14068-00163.

Unit ID # 004

Appendix A: Emission Calculations
Incinerator

Company Name: St. Francis Hospital
Address City IN Zip: 1600 Albany Street
CP:
Pit ID: F097-5510-00163
Reviewer: Mark Caraher
Date: 06/14/96

THROUGH PUT lbs/hr 625	TONS/YR ton/yr 2737.5
------------------------------	-----------------------------

Emission Factor in lb/ton	POLLUTANT					Local/State Allowable
	PM	SO2	CO	VOC	NOX	PM
	34.5	1.09	0.382	0.0666	4.63	0.3 lbs/1000 lbs dry @ 50% EA
Potential Emissions in ton/yr	47.2	1.5	0.5	0.1	6.3	8.8

Methodology

Emission factors are from AP 42 Table 2.3-16 Uncontrolled emission factors for Rotary Kiln Medical Waste Incinerators

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)

file:stfrancs.wk4

PM allowable = 10.77 lbs air theoretical required per lb trash (Air Pollution Engineering Manual AP-40 pp 446)

PM allowable = 0.3lbs/1000 lbs x 10.77 lb air/lb trash x 625 lbs trash/hr x 8760/2000

Unit ID # 004

INCINERATOR HAZARDOUS AIR POLLUTANT EMISSIONS

THROUGH PUT lbs/hr 625	TONS/YR ton/yr 2737.5
------------------------------	-----------------------------

Emission Factor in lb/ton	POLLUTANT				
	HCL	HF	ANTIMONY	ARSENIC	BERYLLIUM
	44.2	0.09	0.020	0.0003	0.00005
Potential Emissions in ton/yr	60.5	0.12743	0.02724	0.00045	0.00007

Emission Factor in lb/ton	POLLUTANT				
	CADMIUM	CHROMIUM	LEAD	MERCURY	NICKEL
	0.0151	0.00443	0.0124	0.0868	0.00353
Potential Emissions in ton/yr	0.02067	0.00606	0.01697	0.11881	0.00483

Emission Factor in lb/ton	POLLUTANTS (DIOXINS)			
	TOTAL TCDD	TOTAL CDD	TOTAL TCDF	TOTAL CDF
	7.23E-09	7.49E-07	2.55E-07	5.20E-06
Potential Emissions in ton/yr (and in pounds per year)	9.90E-09 0.0000198	1.03E-06 0.0020504	3.49E-07 0.0006981	7.12E-06 0.0142350

Methodology

Emission factors are from AP-42 Tables 2.3-16, 2.3-17 and 2.3-18 Rotary Kiln Medical Waste Emission Factors

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Natural Gas Combustion Only

10 < MM BTU/HR <100

Small Industrial Boiler

Boiler # 1

Unit ID # 001

Company Name: St. Francis Hospital

Address City IN Zip: 1600 Albany Street Beech Grove, IN 46107

CP:

Plt ID: F097-5510-00163

Reviewer: MC

Date: 06/14/96

Heat Input Capacity

MMBtu/hr

Potential Throughput

MMCF/yr

37.4

327.4

Pollutant

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	13.7	13.7	0.6	140	2.8	35
Potential Emission in tons/yr	2.2	2.2	0.1	22.9	0.5	5.7

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: Uncontrolled = 140, Low NOx Burner = 81, Flue gas recirculation = 30

Emission Factors for CO: Uncontrolled = 35, Low NOx Burner = 61, Flue gas recirculation = 37

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

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Industrial Boilers

#1 and #2 Fuel Oil

Boiler #1
UNIT ID # 001

Company NanSt. Francis Hospital
Address, City | 1600 Albany Street Beech Grove, IN 46107
CP:
Plt ID: F097-5510-00163
Reviewer: MC
Date: 06/14/96

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

S = Weight % Sulfur

0.3

37.38

2338.92

Emission Factor in lb/kgal	Pollutant					
	PM10	PM	SO2	NOx	VOC	CO
	1.1	2	42.6 (142.0S)	20	0.2	5
Potential Emission in tons/yr	1.3	2.3	49.8	23.4	0.2	5.8

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-2, 1.3-4 and 1.3-8 whereby 55% by weight PM is PM10 (SCC 1-02-005-01/02/03)

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

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10 < MM BTU/HR <100

Small Industrial Boiler

Boiler # 2
Unit ID # 002

Company Name St. Francis Hospital

Address City 11600 Albany Street Beech Grove, IN 46107

CP:

Plt ID: F097-5510-00163

Reviewer: MC

Date: 06/14/96

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

37.4

327.4

Emission Factor in lb/MMCF	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	13.7	13.7	0.6	140	2.8	35
Potential Emission in tons/yr	2.2	2.2	0.1	22.9	0.5	5.7

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: Uncontrolled = 140, Low NOx Burner = 81, Flue gas recirculation = 30

Emission Factors for CO: Uncontrolled = 35, Low NOx Burner = 61, Flue gas recirculation = 37

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

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Boiler # 2
Unit ID # 002

Appendix A: Emissions Calculations
Industrial Boilers
#1 and #2 Fuel Oil

Company NanSt. Francis Hospital
Address, City | 1600 Albany Street Beech Grove, IN 46107
CP:
Plt ID: F097-5510-00163
Reviewer: MC
Date: 06/14/96

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

S = Weight % Sulfur

0.3

37.38

2338.92

Emission Factor in lb/kgal	Pollutant					
	PM10	PM	SO2	NOx	VOC	CO
	1.1	2	42.6 (142.0S)	20	0.2	5
Potential Emission in tons/yr	1.3	2.3	49.8	23.4	0.2	5.8

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-2, 1.3-4 and 1.3-8 where 55% of PM is PM10 (SCC 1-02-005-01/02/03)

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

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Natural Gas Combustion Only

10 < MM BTU/HR <100

Small Industrial Boiler

Boiler # 3

Unit ID # 003

Company NanSt. Francis Hospital

Address City Il 1600 Albany Street Beech Grove, IN 46107

CP:

Plt ID: F097-5510-00163

Reviewer: MC

Date: 06/14/96

Heat Input Capacity

MMBtu/hr

Potential Throughput

MMCF/yr

34.3

300.5

Emission Factor in lb/MMCF	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	13.7	13.7	0.6	140	2.8	35
Potential Emission in tons/yr	2.1	2.1	0.1	21	0.4	5.3

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: Uncontrolled = 140, Low NOx Burner = 81, Flue gas recirculation = 30

Emission Factors for CO: Uncontrolled = 35, Low NOx Burner = 61, Flue gas recirculation = 37

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

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Industrial Boilers

#1 and #2 Fuel Oil

Boiler # 3
UNIT ID # 003

Company Name: St. Francis Hospital
Address, City IN Zip: 1600 Albany Street Beech Grove, IN 46107
CP:
Plt ID: F097-5510-00163
Reviewer: MC
Date: 06/14/96

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

S = Weight % Sulfur

0.3

34.3

2146.2

Emission Factor in lb/kgal	Pollutant					
	PM10	PM	SO2	NOx	VOC	CO
	1.1	2	42.6 (142.0S)	20	0.2	5
Potential Emission in tons/yr	1.2	2.1	45.7	21.5	0.2	5.4

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-2, 1.3-4 and 1.3-8 where 55% of PM is PM10 (SCC 1-02-005-01/02/03)

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

stfrancs.wk4

Air Toxic Calculations

Facility Name: St. Francis Health & Hospital Centers
 Location: 1600 Albany Street Beech Grove, IN 46107
 Permit No.: F097-5510-00163
 Permit Reviewer: Mark Caraher

Air Toxic Emissions

Pollutant	Rate (lb/hr)	Rate @ 8760 hr/yr (ton/yr)	Rate @ ?hr/yr (ton/yr)	Modeled Concentration (ug/m3)	OSHA PEL (ug/m3)	% OSHA PEL
HCL	2.06	9.02		359.5	7434	0.04
Dioxin(s)	8.170E-06	0		1.40E-03	None	
Total		9.02				

Note: HCL ceiling value is 5 ppmv in air which equates to 7434 ug/m3

Air Toxic Stack/s

Stack ID	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (F)
EU 004	31	2.33	1887	200

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Appendix A: Emission Calculations LPG-Propane - Commercial Space Heaters

(2) 85,000 Btu LPG
Space Heaters

Company Name: St. Francis Hospital
Address City IN Zip: 1600 Albany Street, Beech Grove, IN 46107
CP: NA
Plt ID: F097-5510-00163
Reviewer: MC
Date: 10/29/96

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

SO2 Emission factor = $86.5 \times S$

S = weight % Sulfur = 0.29

S = 15 g/100 ft3

d = 0.114 lb/ft3

0.085

7.92

Emission Factor in lb/kgal	Pollutant					
	PM 1.85	PM10 1.85	SO2 25.09 (86.5S)	NOx 7.5	VOC 0.54	CO 1.95
Potential Emission in tons/yr	0.0	0.0	0.1	0.0	0.0	0.0

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

SO2 Emission factor = $86.5 \times S$

S = weight % Sulfur = 0.29

S = 15 g/100 ft3

d = 0.114 lb/ft3

0.085

7.92

Emission Factor in lb/kgal	Pollutant					
	PM 1.85	PM10 1.85	SO2 25.09 (86.5S)	NOx 7.5	VOC 0.54	CO 1.95
Potential Emission in tons/yr	0.0	0.0	0.1	0.0	0.0	0.0

SUM

0.2

Methodolgy

1 gallon of LPG has heating value of 94,000 Btu

Potential throughput (kgals/yr) = heat input capacity (MMBtu/hr) x 8760 hrs/yr x 1 kgal/1000 gal x 1 gal/0.094 MMBtu

Emission factor are from SCC 1-05-002-10 Commercial Space heaters

Emissions (tons/yr) = Throughput (kgals/yr) x Emission factor (lb/kgal) / 2000 lb/ton

Assume S = 15 g/100 ft3 and density of propane = 0.114 lb/ft3

Appendix A: Emission Calculations Kerosene Space Heating

One Kerosene Space
Heater

Company Name: St. Francis Hospital
Address City IN Zip: 1600 Albany Street, Beech Grove, IN 46107
CP: NA
Plt ID: F097-5510-00163
Reviewer: MC
Date: 10/29/96

Heat Input Capacity
MMBtu/hr

0.15

Potential Throughput
kgals/year

9.66

SO2 Emission factor = 86.5 x S

S = weight % Sulfur = 0.3

S = 0.3 %

d = 0.114 lb/ft3

Emission Factor in lb/kgal	Pollutant					
	PM 2.5	PM10 1.25	SO2 43.08 (143.6S)	NOx 18	VOC 1.043	CO 5
Potential Emission in tons/yr	0.0	0.0	0.2	0.1	0.0	0.0

Methodolgy

1 gallon of kerosene has heating value of 135,979 Btu

Potential throughput (kgals/yr) = heat input capacity (MMBtu/hr) x 8760 hrs/yr x 1 kgal/1000 gal x 1 gal/0.094 MMBtu

Emission factor are from SCC 1-05-002-05 Commercial Space heaters - distillate fuel

Emissions (tons/yr) = Throughput (kgals/yr) x Emission factor (lb/kgal) / 2000 lb/ton

Assume S = 0.3 % and density of kerosene is 51.5 lb/ft3

1065 Horsepower
Diesel Generator
(3 units)

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
>600 HP

Page 11 of 13 TSD APP A

Company Name: St. Francis Hospital
City, Indiana: Beech Grove, IN
Reviewer: MC
Date: 10/31/96
CP#:
Plt ID: F097-5510-00163

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity **Unit # 1** S= = WEIGHT % SULFUR
MM Btu/hr

if 1 HP = 2.5425E3 btu/hr then, 1065 HP = 2.71 MMBtu/hr

Emission Factor in lb/MMBtu	Pollutant					
	PM 0.062	PM10 0.0496	SO2 0.4 (1.01S)	NOx 3.1	VOC 0.1	CO 0.81
Potential Emission in tons/yr (@ 500 hrs operation/yr)	0.0	0.0	0.3	2.1	0.1	0.5

Heat Input Capacity **Unit # 2** S= = WEIGHT % SULFUR
MM Btu/hr

if 1 HP = 2.5425E3 btu/hr then, 1065 HP = 2.71 MMBtu/hr

Emission Factor in lb/MMBtu	Pollutant					
	PM 0.062	PM10 0.0496	SO2 0.4 (1.01S)	NOx 3.1	VOC 0.1	CO 0.81
Potential Emission in tons/yr (@ 500 hrs operation/yr)	0.0	0.0	0.3	2.1	0.1	0.5

Heat Input Capacity **Unit # 3** S= = WEIGHT % SULFUR
MM Btu/hr

if 1 HP = 2.5425E3 btu/hr then, 1065 HP = 2.71 MMBtu/hr

Emission Factor in lb/MMBtu	Pollutant					
	PM 0.062	PM10 0.0496	SO2 0.4 (1.01S)	NOx 3.1	VOC 0.1	CO 0.81
Potential Emission in tons/yr (@ 500 hrs operation/yr)	0.0	0.0	0.3	2.1	0.1	0.5

SUM	0.1	0.1	0.8	6.3	0.2	1.6
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Methodology

Emission Factors are from AP 42 Table 3.4-2 and Table 3.4-5

PM emissions calculated from AP42 (Fifth edition, January 1995), Table 3.4-5, Footnotes c and d.

1 hp = 2.5425E3 Btu/hr AP42 (Fifth edition, January 1995), Appendix A

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 500 hr/yr / (2,000 lb/ton)

St. Francis Hospital Boiler Allowable/PTE PM & PM10

Boiler	Emissions Unit	Install Date	Max MMBtu/hr heat input	Allowable lbs/MMBtu	Allowable PM tons/yr	PM10 tons/yr (emfac)
Boiler # 1	EU 001	1994	37.4	0.32	52.72	2.2
Boiler # 2	EU 002	1994	37.4	0.32	52.72	2.2
Boiler # 3	EU 003	1964	34.3	0.49	74.24	2.1
		sum	109.1		179.67	6.5

Applicable State PM rule(s):	EU 003	326 IAC 6.2-1 (6.2-2)	Particulate Emission Limitations for Sources of Indirect Heating
	EU 001 & EU002	326 IAC 6-2-1 (6.2-4)	Particulate Emission Limitations for Sources of Indirect Heating

EU 001: Pt (lbs PM/MMBtu) = $1.09 / Q^{0.26} =$ 0.32 lbs PM/MMBtu
 where Q = 109.1
 EU 002: Pt (lbs PM/MMBtu) = $1.09 / Q^{0.26} =$ 0.32 lbs PM/MMBtu
 where Q = 109.1
 EU 003: Pt (lbs PM/MMBtu) = $0.87 / Q^{0.16} =$ 0.49 lbs PM/MMBtu
 where Q = 34.3

St. Francis Hospital Boiler Allowable/PTE SO2

Boiler	Emissions Unit	Install Date	Max MMBtu/hr heat input	Allowable lbs/MMBtu	Allowable SO2 tons/yr	SO2 if restricted to 2.71 MMgal/yr	Actual Fuel Sulfur %
Boiler # 1	EU 001	1994	37.4	0.5	81.91	**	0.3
Boiler # 2	EU 002	1994	37.4	0.5	81.91	**	0.3
Boiler # 3	EU 003	1964	34.3	0.5	75.12	**	0.3
		sum	109.1		238.93	** 95.0	

** any combination of operating boilers/yr must not exceed 95 tpy total

Applicable State SO2 rule(s): (FED'LY ENFORCEABLE)	EU 001 EU 002 &	326 IAC 12-1-1	40 CFR 60.40c Subpart Dc Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units
Applicable State SO2 rule(s):	EU003	326 IAC 7-1.1-2	Sulfur Dioxide Emission Limitations:specified

EU 001: 40 CFR 60.40c lbs SO2/MMBtu limit = 0.5 lbs SO2/MMBtu
 EU 002: 40 CFR 60.40c lbs SO2/MMBtu limit = 0.5 lbs SO2/MMBtu
 EU 003: 326 IAC 7-1.1-2 lbs SO2/MMBtu limit = 0.5 lbs SO2/MMBtu

2.71 MMgal/yr x 0.5 lbs SO2/MMBtu x 0.14 MMBtu/gal x ton/2000 lbs = 95.0 tons SO2/yr

SUM OF POTENTIAL TO EMIT in TONS PER YEAR

Emissions Unit	PM10 emfac	P M		PM @ 0.3 lbs/ 1000 lbs @ 50% EA	S O ₂		SO ₂ if restricted to 2.71 MMgal/yr	NO _x emfac	VOC emfac	CO emfac
		emfac	allowable		emfac	allowable				
Boiler # 1	2.2	2.3	52.72	----	49.8	81.91	** 95.0	23.4	0.5	5.8
Boiler # 2	2.2	2.3	52.72	----	49.8	81.91	** 95.0	23.4	0.5	5.8
Boiler # 3	2.1	2.1	74.24	----	45.7	45.71	** 95.0	21.5	0.4	5.4
Insignificant Activities	0.1	0.1	0.1	----	1.2	1.2	1.2	6.4	0.2	1.6
Total	6.6	6.8	179.78	8.8	146.5	210.73	98.2	74.7	1.7	18.6

** no combination operating boilers can exceed 95 tons SO₂/yr

Emissions Unit	HCL emfac	HF emfac	ANTIMONY emfac	ARSENIC emfac	BERYLLIUM emfac	CADMIUM emfac	CHROMIUM emfac	LEAD emfac	MERCURY emfac	NICKEL emfac	DIOXINS emfac
Total	60.5	0.127	0.0272	0.00045	0.00007	0.0207	0.00606	0.017	0.119	0.00483	8.510E-06

PM allowable from 326 IAC 6.2-1; SO₂ allowable from NSPS Subpart Dc limit & 326 IAC 7-1.1-2

Insignificant activities are comprised of (3) 1065 HP standby diesel generators, (1) kerosene space heater & (2) propane space heaters

PTE for the 3 diesel generators was calculated at 500 hours of operation per year

file: stfrancs.wk4